



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/989,373	11/21/2001	Yasuyoshi Serizawa	Q67325	1474
7590 06/23/2004 SUGHRUE, MION, ZINN, MACPEAK & SEAS, PLLC 2100 Pennsylvania Avenue, NW Washington, DC 20037			EXAMINER POKER, JENNIFER A	
			ART UNIT 2832	PAPER NUMBER

DATE MAILED: 06/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/989,373	Applicant(s) SERIZAWA ET AL.	
	Examiner Jennifer A. Poker	Art Unit 2832	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☒ Claim(s) 4 and 5 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 November 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on April 14, 2004 has been entered. Claims 1-5 are pending and are being examined.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Number 5,115,108 to Ogawa, et al, in view of U.S. Patent Number 4,401,864 to Ichikawa.

Regarding claims 1 and 2, Ogawa, et al, discloses a switch comprises:

- (1) A housing (abstract);
- (2) An operating knob the operating knob being pivotally supported on the housing (abstract; column 4, lines 58 & 59);
- (3) A contact wiring board having opposing contact end portions (15a, 16a) arranged under push bodies (abstract);

(4) A rubber switch member interposed between the housing and the contact wiring board having an inner piece comprising conductive contact pieces (19c, 20c) arranged so as to be opposed to the mutually-opposing the contact end portions of the contact wiring board; and switching members in particular, such as rubber buckling portions formed together with the rubber switch member or elastically slidable push members (abstract);

(5) A rubber buckling portions (19a, 20a) of the rubber switch member as click feeling providing members. As can be seen from figures 2a and 2b, the buckling portions (19a, 20a) are made of a wall portions, an outer (top) portion, and an inner portion with a conductive contact piece (abstract);

The rubber shape of the buckling portions can deformably absorb the difference in stroke between the two rubber buckling portions. As can be seen in figure 5(a), when one side is pressed, the walls of the buckling portions of that side deform while the walls of the opposing buckling portions of the other side remain “un-buckled” not producing a clicking feeling.

Ogawa, et al, discloses the claimed invention except for the plurality of pressing portions extending from the operating knob.

Ichikawa discloses a switch mechanism comprising an operating member in a rockable manner, protuberances formed on the operating member, which when the operating member is depressed, the protuberances, respectively, open or close their associated electrical contacts. (Column 4, lines 41-42, 61-66) (Figures 4 and 5)

One skilled in the art, at the time the invention was made, would have found it obvious to combine the teachings of Ogawa, et al, with the teachings of Ichikawa and extend leg portions from the reverse surface of the operating knob in order to contact the contact portions stationed directly below.

Regarding claim 3, it can be seen in figures 7(a), 7(b), 8(a), and 8(b) of Ogawa, et al, that the wall portions of the buckling portions appear to be “generally” conical shaped.

Allowable Subject Matter

4. Claims 4 and 5 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

5. The following is a statement of reasons for the indication of allowable subject matter:

No prior art of reference or combination thereof teaches a multi-stage click switch in accordance with the limitations of independent claim 1, wherein an outer portion of one of the rubber contact portion which is used for a first-stage switching operation is cylindrical, and the inner portion of one of the contact portions which is also used for the first-stage switching operation is cylindrical; wherein an inner diameter of the outer portion is greater than an outer portion of the inner; the outer portion is displaced downwardly around the inner portion.

Response to Arguments

6. Applicant's arguments filed January 8, 2004 have been fully considered but they are not persuasive. Applicant's arguments relating to claim 1 state that the references in combination do not teach the claimed switch. In particular Applicant believes that the deformation of the walled portions of the cited references is not the equivalent to that of the claimed invention. Examiner maintains that the rubber bucking portions, which are constructed of wall portions, are used as click

Art Unit: 2832

feeling members. The rubber shape of the buckling portions deformably absorb the difference in stroke between two rubber buckling portions.

Further arguments are addressed below:

- (a) Claim rejections under 35 U.S.C. 112, second paragraph are withdrawn.

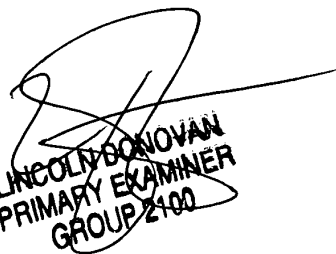
Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer A. Poker whose telephone number is 571-272-1997. The examiner can normally be reached on 5:30-4:00 Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Elvin G. Enad can be reached on 571-272-1990. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jap
June 16, 2004


LINCOLN DONOVAN
PRIMARY EXAMINER
GROUP 2100